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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,254	12/30/2000	Wolfgang Roesner	AUS920000228US1	7483

42640 7590 03/14/2005

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EXAMINER

GARCIA OTERO, EDUARDO

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 09/752,254	Applicant(s) ROESNER ET AL.	
	Examiner Eduardo Garcia-Otero	Art Unit 2123	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 04 February 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): the 35 USC 101 rejections are overcome, see attachment.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-3, 5, 6 and 10-16.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See attachment.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

ADVISORY ACTION

Introduction

1. Title is: HIERARCHICAL PROCESSING OF SIMULATION MODEL EVENTS.
2. First named inventor is: ROESNER.
3. Claims 1-3, 5-6, and 10-16 are pending.
4. Claims 1 and 6 and 13 are independent.
5. US application filing date is 12/30/2000, no earlier priority is claimed.
6. Applicant's After Final request for reconsideration was received 2/4/2004

Index of Important Prior Art

7. *Smith* refers to "HDL Chip Design" by Douglas J. Smith, 1996, ISBN 0-9651934-3-8, Chapter 5 "Structuring a Design" pages 113-130.
8. *MS Dictionary* refers to Microsoft Computer Dictionary, Fourth Edition, by Microsoft Press, JoAnne Woodcock as Senior Contributor, ISBN 0-7356-0615-3, May 1999, pages 96-97.
9. *Bargh* refers to US Patent 6,195,627.
10. *Rostoker* refers to US Patent 6,470,482.

Definitions

11. IEEE Dictionary refers to The Authoritative Dictionary of IEEE Standards and Terms, Seventh Edition, by IEEE Press, ISBN 0-7381-2601-2, 2000:
 - **"comment (software)"** is defined as "Information embedded within a computer program, job control statements, or a set of data, that provides clarification to human readers, but does not affect machine interpretation."
 - **"comment source statements"** is defined as "Source statements that provide information to people reading the software source code and are ignored by the compiler".
12. Computer Desktop refers to The Computer Desktop Encyclopedia, by Alan Freedman, AMACOM, 1996, ISBN 0-8144-012-4:
 - **"comment"** is defined as "A descriptive statement in a source language program that is used for documentation."
13. MS Dictionary refers to Microsoft Computer Dictionary, Fourth Edition, by Microsoft Press, JoAnne Woodcock as Senior Contributor, ISBN 0-7356-0615-3, May 1999:

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- **“comment”** is defined as “Text embedded in a program for documentation purposes. Comments usually describe what the program does, who wrote it, why it was changed, and so on. Most programming languages have a syntax for creating comments so that they can be recognized and ignored by the compiler or assembler. Also called remark. See also comment out.”

Applicant's Remarks

14. INSTRUMENTATION ENTITIES. At Remarks page 2, the Applicant asserts that “instrumentation entity” is not a subset of “design entity”, and refers to Amendment A, page 10, received 9/7/2004, which states “instrumentations entities” are “HDL entities utilized to perform facilitate the testing of the entities in the digital circuit design”. Amendment A also states “design entities” are “HDL entities included in the digital circuit or system that is the object of simulation testing”.
15. It is not clear how to distinguish between these various entities.
16. PRE-PENDED FLAG. At Remarks page 2, Applicant asserts that a “pre-pended flag” is a flag that is “pre-pended to the entity in question”, this is a circular definition. Applicant also refers to FIG 4C and FIG 11B-11C. Note that FIG 4C is discussed at specification page 36, which states “This identification string is pre-pended to the signal name”. Possibly a “pre-pended flag” is a pre-pended identification string, and possibly the entity in question is the signal name. All of this is far from clear.
17. PROTO. At Remarks page 2, Applicant’s definition of “proto” includes “a list of references to other entities directly instantiated by the entity...”, which is not clear.
18. REJECTIONS UNDER 35 USC 101, WITHDRAWN. Applicant asserts that the claims are statutory because they are using function type language to characterize structural elements, and that “Means for” is an officially recognized claim type that uses this style.
19. First, in claim 1 (currently amended), the term “for use in a...” occurs in the preamble, and is interpreted as a mere intended use. MPEP 2111.02 states “The determination of whether a preamble limits a claim is made on a case-by-case basis in light of the facts in each case; there is no litmus test defining when a preamble limits the scope of a claim.” It is preferable to explicitly place limitations outside of the preamble (or at least repeat the limitations

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outside of the preamble), and thus avoid the risk of ambiguity and protracted prosecution caused by a “case-by-case” determination of the preamble.

20. In claim 1 (currently amended), the Examiner interprets the “for use in” as a mere intended use.
21. If the Applicant intends the preamble term “for use in” as a functional limitation, then please clearly and explicitly define what features of the apparatus are described by these functional limitations, and how these functions affect the structural features of the apparatus. Note MPEP 2114 states “features of an apparatus may be recited either structurally or functionally”.
22. Additionally in claim 1, the first limitation states “processed by a post-compiler instrumentation load tool to instantiate” and “recognized by an HDL compiler” and “compiler does not instantiate” and “generated by” and “responsive to one or more input signals” and so forth. Please clarify what features of the apparatus are functionally defined by these terms, and how these functions affect the structural features of the apparatus.
23. However, based upon Applicant’s assertions, the 35 USC 101 rejections are withdrawn.
24. REJECTIONS UNDER 35 USC 112 INDEFINITENESS, MAINTAINED. Applicant states “Applicants are simply unsure what structural changes might help”. The Examiner will attempt to clarify the issues by giving an example.
25. Claim 1 (currently amended) contains two limitations. The two limitations are: “a first instrumentation...”, and “a second instrumentation”. The first limitation contains three commas. The clause between the first comma and the second comma states **“the data representing said first instrumentation entity including a non-conventional HDL comment port mapping syntax processed by a post-compiler instrumentation load tool to instantiate said first instrumentation entity within at least one of said one or more design entities”**.
26. First, does the term “including a non-conventional...” refer to “the data”, or to “said first instrumentation entity”?
27. Second, what does “non-conventional” mean?
28. Third, does the term “processed by” refer to the “data”, or to “first instrumentation entity”, or to “port”, or to “mapping syntax”?

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29. Fourth, does the term “to instantiate” refer to “representing”, or to “including”, or to “mapping”?
30. Fifth, the term “instrumentation entity” appears to be “within” a “design entity”, so it appears to be a subset of the design entity? The relationship between “instrumentation entity” and “design entity” is not clear. Applicant’s Remarks received 9/14/2004 at page 10 states that the compiler can distinguish between “design entities” and “instrumentation entities”, and also states “associate an instrumentation entity with a target design entity”.
31. Thus, a single clause within a single limitation has generated five different issues of indefiniteness. Note that the first limitation has four clauses. The above five issues of indefiniteness are just the tip of the iceberg.
32. The Examiner hopes that this detailed discussion adequately illustrates the substantial issues of indefiniteness for the Applicant, and clarifies what type of alterations may assist in overcoming the pending rejections.
33. To summarize, 35 USC 112 second paragraph requires “particularly pointing out and distinctly claiming the subject matter”. This statutory requirement has not yet been satisfied.


Conclusion

34. All pending claims stand rejected.
35. The 35 USC 101 rejections are withdrawn.
36. As the Examiner has previously stated, the Examiner suggests (but does not require) using more indentations to show the hierarchical relationship of the internal parts of claim 1 first limitation. A more hierarchical or structured format will assist in overcoming the rejections under 35 USC 112.

Communication

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Garcia-Otero whose telephone number is 571-272-3711. The examiner can normally be reached on Monday through Thursday from 9:00 AM to 8:00 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner’s supervisor, Kevin Teska, can be reached at 571-272-3761. The fax phone number for this group is 703-872-9306.

* * * *


KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER